REMARKS

In an Office Action mailed December 17, 2002, the Examiner entered the prior Response and renumbered three new claims as Claims 28-30. Pending Claims 1-10, 13 and 28-30 are rejected under 35 U.S.C. §112, first paragraph for alleged lack of enablement. The pending claims are also rejected under 35 U.S.C. §112, second paragraph for indefiniteness and for insufficient antecedent basis.

A petition for an extension of time for three months accompanies this response so this response will be deemed to have been timely filed. A Notice of Appeal also accompanies this response so that the application will remain pending. Please charge the fees due in connection with these accompanying documents, and any other fees due, to Deposit Account No. 17-0055.

Each issue raised by the Examiner is considered separately below. Reconsideration of the merits of this patent application and issuance of a Notice of Allowance are respectfully requested.

Rejections Under §112, second paragraph

Claim 1 was said to be vague and indefinite for use of the term "when the cell is under the influence of a protein." The phrase no longer appears in the claims. Instead, the claims recite that the migration activity can be regulated by the protein, which is consistent with the Examiner's statements regarding enablement. The phrase "can be regulated" is used in contemplation of the situation in which regulation of the migration activity by the protein happens after the nematode is treated with a modulator.

Claim 1 was also said to provide insufficient antecedent basis for the term "the treated nematode." Claim 1 now recites that the treating step produces a treated nematode, thereby providing antecedent basis for the term.

Accordingly, the grounds for rejection under §112, second paragraph are believed overcome and reconsideration is respectfully requested.

Rejections Under §112, first paragraph

The Examiner maintains that the only MPT proteins enabled in the specification are (1) a wild-type protein of SEQ ID NO:2, (2) a protein encoded by the heterologous polynucleotide sequence of SEQ ID NO:1 under the control of a promoter functional in the nematode, (3) a chimeric protein comprising the metalloprotease and thrombospondin domains of SEQ ID NO:2 and (4) proteins selected from the group consisting of murine ADAMTS-1 protein, bovine procollagen-1 N-proteinase and human aggrecan-degrading metalloprotease.

In an effort to meet the Examiner's concerns, Claim 1 now recites various proteins said by the Examiner to be enabled by the specification. Claims 6-10 which recited various additional proteins, are cancelled, although applicants retain the right to pursue such claims in one or more continuing patent application. Applicants state for the record that they do not intend to concede any available equivalents to the sequences now recited in Claim 1, including, but not limited to, amino acid and nucleotide sequence variants that do not materially affect the ability of the protein (or encoded protein) to regulate the migration activity, in particular those having more or fewer thrombospondin repeats.

Although applicants here accept the Examiner's proposed limitations to further the prosecution, applicants continue to believe that broader claims are appropriate. The claims sought are not claims to particular proteins or nucleic acid sequences, nor to a known or unknown modulator. Rather, the claims are drawn to an assay, testing, or selection method that permits one to evaluate characteristics of MPT proteins, whether or not those proteins themselves confer a gonadal cell migration activity as recited in the claims.

The claims as formulated by the Examiner do not provide the applicants with the full reward for their inventive contribution to the art. Once the applicants recognized that the sufficiency or insufficiency of an MPT protein could be evaluated in a tiny nematode rather than in a larger animal, it became immediately apparent that an MPT protein of interest in the method could be one having impaired functionality and not just one of those proteins mentioned or disclosed in the application. To the contrary, the applicants' system provides a convenient tool for evaluating the impact of MPT protein lesions and for assessing strategies for overcoming those lesions, without regard to the native function of the MPT protein *in situ* in its natural host.

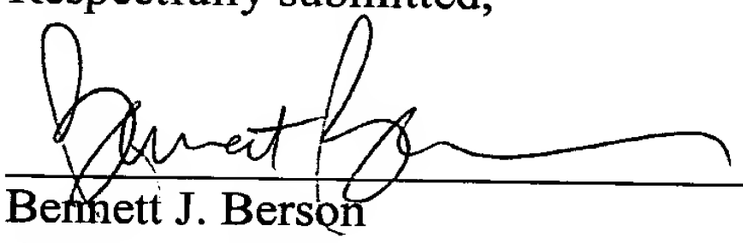
In fact, the class of MPT proteins (now more generally referred to as ADAMTS genes and proteins) appears to be quite small, its members all closely related. As of 2003, the class includes only eighteen genes and their products. If skilled artisans are readily able to distinguish members and non-members of the class such that only eighteen members fall within the class, then the Applicants should likewise be entitled to the benefit of that understanding. Applicants have no scientific reason to doubt that any gene in the class can be advantageously and conveniently studied in the system enabled by the applicants for the purposes described above. Having enabled the assay method broadly, Applicants' claims should not be limited to those members of the class known as of the filing date. Rather, applicants should be entitled to protection for use of their invention across the entire class,

including use of the invention to determine whether a gene or protein of interest as a putative member of the class is, in fact, able to regulate migration activity.

In summary, applicants here present narrower claims solely to advance prosecution of this application which is now under final rejection. However, if upon reconsideration the Examiner is inclined to expand the scope of claims, applicants stand ready to reinstate broader claims in this application. If not, applicants intend to pursue such claims in a continuing case.

Early and favorable action on the merits is respectfully requested. Should any further issues arise, the Examiner is asked to contact the undersigned directly.

Respectfully submitted,



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